

Technical Attachment

**Graphical Depictions of an Active Fire Weather Season in the  
Western Portions of Southern Region**

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The winter of 2005-2006 has seen an abundance of wildfires across Oklahoma, Texas, and New Mexico. The combination of several days worth of dry and windy conditions, along with extremely dry vegetation has led to fire weather concerns being the impact weather of the day for much of the Southwest. Several Weather Forecast Offices (WFOs) in Southern Region have turned to the web to disseminate information during this winter's fire weather season. Graphical forecasts are not new, as various WFOs have been using the Internet to highlight impact weather information for years. WFO Melbourne, in particular, has had extensive experience in the use of Graphical Hazardous Weather Outlooks (GHWOs) and Graphical Hurricane Local Statements (GHLs) for conveying threat information. Other offices, such as Atlanta, Jackson, Memphis, Shreveport, Birmingham and Huntsville have utilized GHWOs and/or Graphicasts to depict graphical weather information on the web during thunderstorm and rain events this January. With an extended period of extreme fire weather danger across the western third of Southern Region this December and January, WFOs Fort Worth (FWD), Norman (OUN), Tulsa (TSA), Lubbock (LUB), Midland (MAF), and San Angelo (SJT) made frequent use of the Internet to graphically depict past, present, and future fire weather information. Examples of some of the graphics appear below.

WFO OUN used a special web page to convey specific fire weather information. This page included a day-by-day breakdown of expected fire weather conditions, similar to this graphic, generated on January 10<sup>th</sup>:

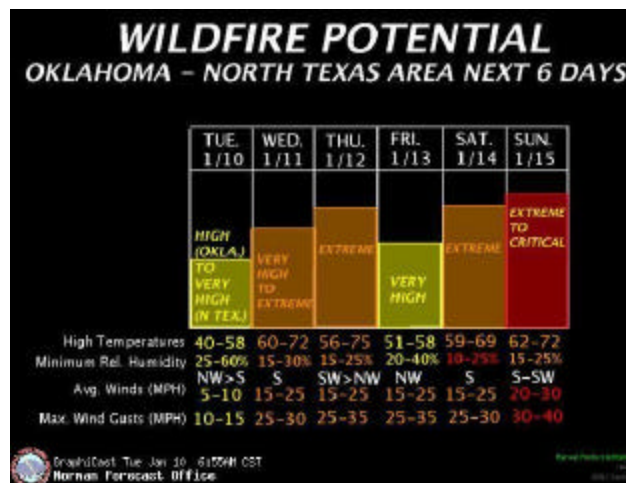


Figure 1: WFO OUN 'one page glance'

WFO FWD also used a special web page to highlight the ongoing fire weather situation. This web page, which can be easily accessed from the FWD home page, highlights the Hazardous Weather Outlook and the expected relative humidity forecast for the upcoming day.



Figure 2: WFO FWD 'one stop shopping'

WFO MAF used their web page to graphically depict weather conditions ripe for wildfires. After the wildfire conditions diminished, they reviewed the scenario and impacts on the web. See the full article at:

<http://www.srh.noaa.gov/maf/headline/?id=2006-01-05-firefirst>

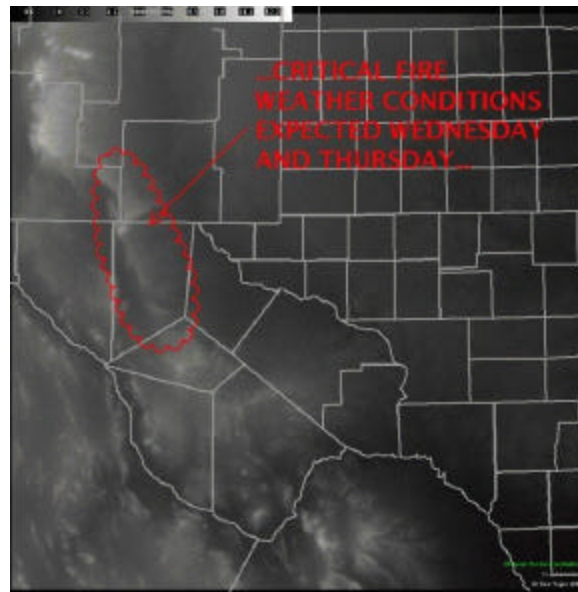


Figure 3: WFO MAF 'graphical outlook'

WFO SJT used Graphicasts on their web page to highlight the extreme fire weather conditions earlier this month. This graphic not only shows the expected conditions, but also contains a call to action statement at the bottom.

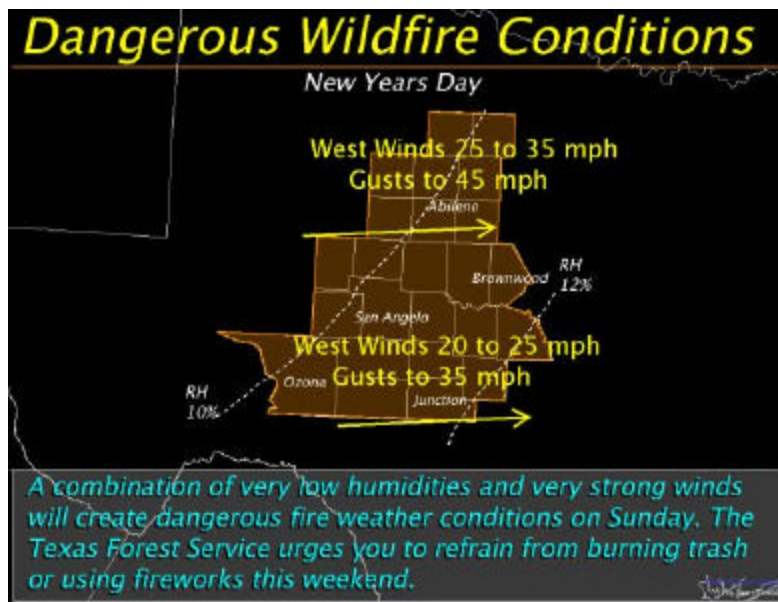


Figure 4: WFO SJT 'graphicast'

WFO TSA provided hourly fire weather-related forecast products on their web site. These derived fields are automatically generated from the base grids in GFE. A portion of their page, highlighting relative humidity values, can be seen here. Additionally, WFO TSA develops numerous risk analysis graphics directly from their GFE forecast grids. An example of some of these products can be found at: <http://www.srh.noaa.gov/tsa/cgi-bin/decisionmaker.php>

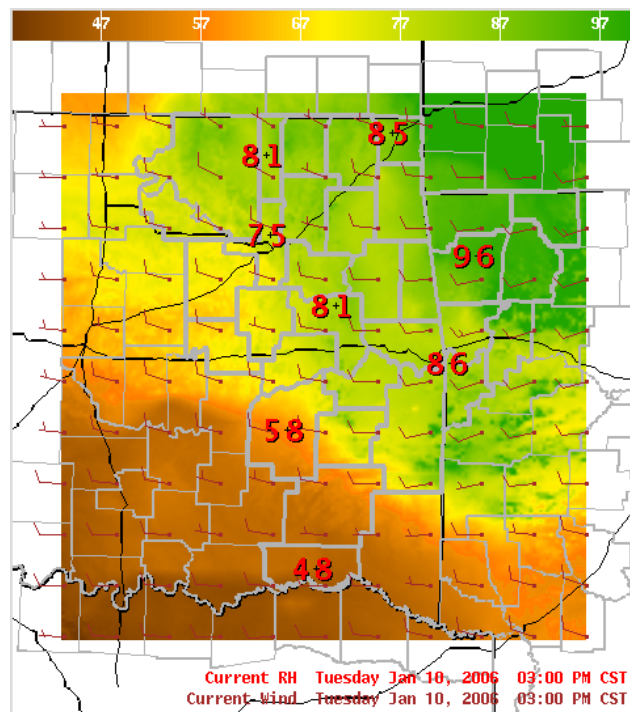
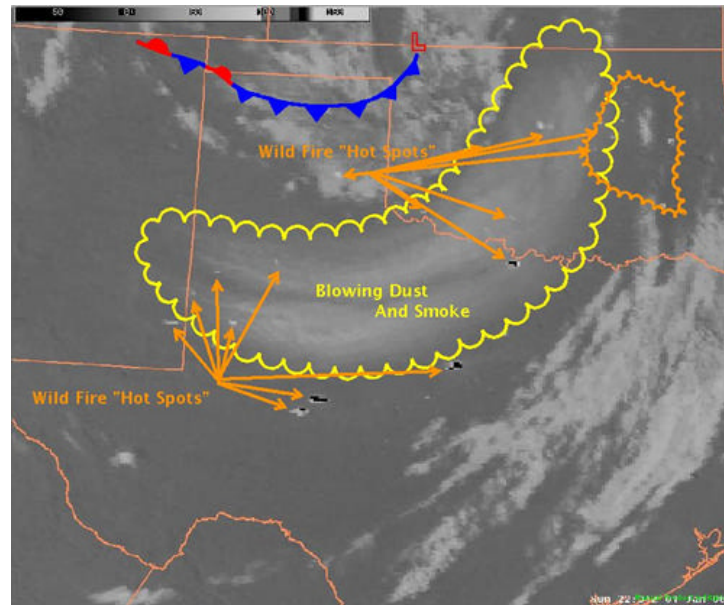


Figure 5: WFO TSA 'GFE generated graphic'

And finally, WFO LBB graphically represented past weather conditions over the New Year's Day Holiday. Their page included a graphical representation of wind speeds, blowing dust, and fires across the Southern Texas Panhandle, and Texas South Plains.



**Figure 6: WFO LUB 'graphical explanation'**

Their full page on this event can be found at:

[http://www.srh.noaa.gov/lub/climate/Local\\_interest\\_events/wind\\_event\\_01012006/wind\\_event\\_01012006.html](http://www.srh.noaa.gov/lub/climate/Local_interest_events/wind_event_01012006/wind_event_01012006.html)

While WFO web sites are not exactly new, more and more offices are beginning to use them to present graphical impact weather information for their county warning area. The list of Southern Region offices providing enhanced web pages and graphics is by no means limited to those shown here. These offices and many others across the Southern Region, have demonstrated the ability of the local office to be flexible and to produce new pages depending on the type of the weather impacting their county warning area. Customer feedback indicates this approach is a highly popular way to convey the information.